

REMARKS

Claims 1-33 are pending in this application. By this Amendment, claims 12, 14 and 15 are amended for clarity and new claims 21-33 are added.

Applicants gratefully acknowledge the Office Action's indication that claims 8-10, 13-16 and 20 contain allowable subject matter.

The Office Action rejects claims 1-7, 11-12 and 17-19 under 35 U.S.C. §102(e) by U.S. Patent 6,498,810 to Kim et al. (hereafter Kim). The Office Action also rejects claim 1 under 35 U.S.C. §102(e) by U.S. Patent 6,271,885 to Sugiyama. The rejections are respectfully traversed.

Independent claim 1 recites computing two-dimensional prediction error information by using a motion vector to be coded and the $n(n \geq 1)$ number of neighboring motion vectors and selecting prediction error information having the minimum bitrate from the computed error information. Independent claim 1 further recites obtaining mode information and coding the obtained predicted error information.

Kim and Sugiyama, either alone or in combination, do not teach or suggest at least these features of independent claim 1. That is, Kim does not teach or suggest computing two-dimensional prediction information and selecting prediction error information having a minimum bit rate from the computed prediction error information. The Office Action appears to reference Kim's col. 3, lines 31-51 for these features. However, this section of Kim relates to motion vector coding being separately performed for both X and Y. That is, this relates to the

motion vector X using a minimum rate predictor is determined and the component Y can be coded or determined in a similar way. In other words, this section of Kim expressly discloses independent analysis of both X and Y. As such, this does not relate to computing two-dimensional prediction error information and then selecting prediction error information from the computed error information. Rather, as stated above, this merely shows that separate components may be coded and/or determined in a similar way.

The Office Action also appears to rely on Sugiyama's col. 3, lines 4-8 and 47-49 and col. 5, lines 7-27. However, these sections do not relate to computing two-dimensional prediction error information and selecting prediction error information from the computed error information. Rather, at best, this merely discloses that motion vectors MV may be converted into two-dimensional arrangements. See for example, col. 3, lines 47-49. Clearly, this does not relate to computing two-dimensional prediction error information and selecting prediction error information from the computed error information as recited in independent claim 1. Sugiyama does not relate to the computation of two-dimensional prediction error information and selecting from computed two-dimensional prediction error information.

For at least the reasons set forth above, Kim and Sugiyama do not teach or suggest all the features of independent claim 1. Thus, independent claim 1 defines patentable subject matter.

New independent claim 21 defines patentable subject matter for at least similar reasons as independent claim 1. For example, independent claim 21 recites computing two-dimensional prediction error information based on a motion vector and neighboring motion vectors and

selecting prediction error information from the computed two-dimensional prediction error information. For at least similar reasons as set forth above, the applied references do not teach or suggest these features.

Furthermore, independent claim 11 recites checking whether factors of 'X' and 'Y' of the obtained prediction error information of the minimum bitrate are '0' and coding the prediction error information of the minimum bitrate.

Kim does not teach or suggest at least these features of independent claim 11. The Office Action appears to reference Kim's col. 6, lines 19-25 and col. 4, lines 31-51. However, these sections do not relate to checking whether factors of X and Y of an obtained prediction error information of the minimum bitrate are '0' and coding the prediction error information of the minimum bitrate. Accordingly, independent claim 11 defines patentable subject matter.

Furthermore, new independent claim 27 defines patentable subject matter for at least similar reasons. That is, new independent claim 27 checking whether an 'X' factor and a 'Y' factor of the selected prediction error information are '0' and coding the selected prediction error information based on the checking and coding mode information indicative of a neighboring motion vector used with the selected prediction error information.

For at least the reasons set forth above, each of independent claims 1, 11, 21 and 27 define patentable subject matter. Each of the dependent claims depends from at least one of these independent claims and therefore defines patentable subject matter at least for this reason.

Serial No. 10/002,183
Reply to Office Action dated December 9, 2004

Docket No. P-0309

In addition, the dependent claims also recite features that further and independently distinguish over the applied references.

CONCLUSION

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Favorable consideration and prompt allowance of claims 1-32 are earnestly solicited. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, David C. Oren, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
FLESHNER & KIM, LLP



Daniel Y.J. Kim
Registration No. 36,186
David C. Oren
Registration No. 38,694

P.O. Box 221200
Chantilly, Virginia 20153-1200
(703) 766-3701 DYK:DCO/kah
Date: March 2, 2005

Please direct all correspondence to Customer Number 34610